



Material declaration form

General Information			
IPC	1752	Version	2
Form type*	Distribute		
Sectionals*	Material information	Subsectionals*	A-D
	Manufacturing information		*: Required Field

Supplier Information			
Company name*	STMicroelectronics	Response Date*	2026-02-20
Contact name*	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact phone*	Refer to Supplier Comment section	Contact email*	Refer to Supplier Comment section
Authorized representative*	Rossana Bonaccorso	Representative title	Material Declaration Champion
Representative phone*	Refer to Supplier Comment section	Representative email*	Refer to Supplier Comment section
Supplier comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

Uncertainty statement

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Legal statement

Supplier acceptance* true Legal declaration* Standard

Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.



Product				
Mfr item number	Mfr item name	Version	Manufacturing site	date
SPC560B50L3B4E0X	A91L*FB50BFQ	B	1054	2020-04-14
	Amount	UoM	Unit type	ST ECOPACK Grade
	681	mg	Each	ECOPACK 2
Identity	Authority			
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)			

Manufacturing information			
J-STD-020 MSL rating	Classification temperature	Number of reflow cycles	
3	260	3	
Bulk solder termination	Terminal plating	Terminal base alloy	Comment
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	CD00388552

Package designator	Package size	Number of instances	Shape
QFP	14.00,14.00,1.00	100	gull wing
Comment	LQFP 100 14x14x1.4 1. MDF valid for CPs: SPC560B44L 3B4FVX.SPC560B50L 3B4E0X.SPC560B50L 3B4E0Y.SPC560B50L 3B6E0X.SPC560B50L 3C4E0X.SPC560B50L 3C6E0X.SPC560B50L 3C6E0Y		

QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 March 2015	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	true
2 - Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply)	false
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description

QueryList : ELV directive : 2000/53/EC amended 2020/363_March 2020	Response
1 - Product(s) meets EU ELV requirements without any exemptions	true
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Exemption Id.	Description

QueryList : California Prop65 list, dated 3rd January 2025	Response		
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen	true		
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen	false		
Substance	amount in product (mg)	Application	ppm in product

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014	Response			
QUERY				
Response				
1 - Product(s) requires marking for the presence of restricted substances and must be marked with an Environmental Protection Use Period under China's Measures for Administration of the control of pollution by Electronic Information Products				
2 - Product(s) is eligible for marking with the e code under China's Measures for Administration of the control of pollution by Electronic Information Products				
Hazardous substance				
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE
O	O	O	O	O

QueryList : REACH-4th February 2026	Response			
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	Amount in embedded article / Homogeneous material (mg)	Application - article / Homogeneous material	ppm in article /Homogeneous material



QueryList : Responsible metals sourcing	Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	true
The following metals are present is the component :	Cobalt, Tantalum, Tin, Tungsten.

QueryList : Korea Chemical Control Act_ 27 Dec 2017 update	Response
The Product does contain at least one of the substances listed in Chemical Control Act	false

QueryList : China GB 33372-2020 Limit standard for volatile organic compounds content in adhesives - 4 March 2020 application date 1st December 2020	Response
The product contains adhesives identified under GB 33372	True
All the adhesive impacted complies with GB 33372	true

QueryList:Stockholm Convention Persistent Organic Pollutants (POP)	Response
Product is compliant with Annex A, B and C of Stockholm Convention Persistent Organic Pollutants	true

QueryList: EU Ship Recycling Regulation No. 1257/2013	Response
Product contains hazardous materials listed in Annex II of EU Ship Recycling Regulation No.1257/2013 and 2009/16/EC Directive	False

Other Fluorinated Substances	Response
QUERY	Response
The product is containing fluorinated substance.	False
Substance Name, CAS	
Polytetrafluoroethylene, CAS 9002-84-0	False
Thiophenium CAS, 209482-18-8	False
Triphenylsulfonium nonaflate, CAS 144317-44-2	False
Trifluoroacetic anhydrid,e CAS 407-25-0	False

BPA Declaration	Response
Product does not contain Bisphenol A (Isopropylidenediphenol)	True

Montreal Protocol	Response
Product does not contain Ozone Depleting Substances based on Annex I to Annex VII of EU REGULATION (EC) No 1005/2009	True

Environmental Protection Agency:Toxic Substances Control Act (TSCA). Section 6(h)	Response
Product does not contain Phenol, isopropylated, phosphate (3:1)	True

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	A91L*FB50BFQ		681.4400		5999999.0	999999.0
Homogeneous material	Material group	Mass	Unit of measure	Level	Substance category	Substance	CAS	Exempt	Mass	Unit of measure	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	16.267	mg	supplier	die	Silicon(Si)	7440-21-3		15.661	mg	962747	22982
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.029	mg	1783	43
				supplier	metallisation	Copper(Cu)	7440-50-8		0.257	mg	15799	377
				supplier	metallisation	Cobalt(Co)	7440-48-4		0.001	mg	61	1
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.083	mg	5102	122
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.003	mg	184	4
				supplier	metallisation	Tungsten(W)	7440-33-7		0.002	mg	123	3
				supplier	Passivation	Silicon nitride(Si3N4)	12033-89-5		0.065	mg	3996	95
				supplier	passivation	Silicon oxide	7631-86-9		0.166	mg	10205	244
				Leadframe	M-004 Copper and its alloys	192.737	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8	
supplier	alloy & coating	Iron(Fe)	7439-89-6						3.977	mg	20634	5836
supplier	alloy & coating	Iron Phosphide	26508-33-8						0.239	mg	1240	351
supplier	alloy & coating	Zinc(Zn)	7440-66-6						0.208	mg	1079	305
supplier	alloy & coating	Silver (Ag)	7440-22-4						0.035	mg	182	51
supplier	tape	Polyimide film	proprietary						9.604	mg	49830	14094
supplier	tape	Polyethylene-terephthalate	proprietary						6.531	mg	33886	9584
supplier	tape	Acrylonitrilebutadiene copolymer	proprietary						1.152	mg	5977	1691
supplier	tape	Bismaleimide	35325-39-4						0.960	mg	4981	1409
supplier	tape	Phenol type resin	29690-82-2						0.960	mg	4981	1409
Die attach	M-015 Other organic materials	2.431	mg	supplier	glue	Silver(Ag)	7440-22-4		2.176	mg	895105	3193
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.134	mg	55121	197
				supplier	glue	Bismaleimide resin	35325-39-4		0.097	mg	39901	142
				supplier	glue	Epoxy-cyclohexane	3388-04-3		0.012	mg	4936	18
				supplier	glue	Spacer polymer	proprietary		0.012	mg	4936	18
Bonding wires	M-004 Copper and its alloys	0.737	mg	supplier	wire	Copper(Cu)	7440-50-8		0.715	mg	970149	1049
				supplier	wire	Palladium(Pd)	7440-05-3		0.022	mg	29851	32
Encapsulation	M-011 Other inorganic materials	463.596	mg	supplier	mold compound	Silica vitreous	60676-86-0		400.546	mg	863998	587793
				supplier	mold compound	Epoxy type resin	25068-38-6		34.770	mg	75001	51024
				supplier	mold compound	Phenol type resin	29690-82-2		23.180	mg	50000	34016
				supplier	mold compound	Mercaptopropyl	4420-74-0		2.318	mg	5000	3402
				supplier	mold compound	Quartz	14808-60-7		1.391	mg	3000	2041
Connections coating	Solder	5.672	mg	supplier	mold compound	Carbon black	1333-86-4		1.391	mg	3000	2041
				supplier	solder alloy	Tin (Sn)	7440-31-5		5.672	mg	1000000	8324